



Contribution ID : 246

Type : Oral talk

Neutral meson production results in pp, p–Pb and Pb–Pb collisions in ALICE

Friday, 25 October 2024 13:00 (15)

In high-energy hadronic collisions neutral meson spectra can be measured with high precision in a wide range of transverse momenta, providing valuable input for the nucleon structure functions parametrization and for studying in great detail the cold and hot matter effects.

The ALICE experiment at the LHC provides the possibility to measure photons in large acceptance EMCAL or precise PHOS calorimeters and to reconstruct photons converted in $e+e-$ pairs and reconstructed in the central tracking system. Simultaneous measurement of neutral meson spectra with different methods provides good cross-check of the measurements and allows one to dramatically reduce uncertainties.

In this talk we present recent results from ALICE on the neutral meson measurements in pp, p–Pb, and Pb–Pb collisions at LHC energies based on the data collected in LHC Run 2 and the performance of ALICE in LHC Run 3.

Primary author(s) : AVERYANOV, Dmitry (NRC "Kurchatov Institute")

Presenter(s) : AVERYANOV, Dmitry (NRC "Kurchatov Institute")

Session Classification : HEP Experiment

Track Classification : High energy physics: experiment